

CS 250: Syllabus – Spring 2018

Dr. Ayman Elmesalami

1. Basic Course Information

1.1 Objectives:

This course covers intermediate-level C++ programming and the software development issues that arise in practical programming projects. Topics include C++ syntax and semantics, principles of design, and basic software engineering skills. A heavy emphasis is placed on the development of abstract data types as the basic modules or building blocks of a well-designed program.

1.2 Meeting Times

Lectures

0800-0915	tr	kauf 0100
0930-1045	tr	ocnps 0100

Labs

1620-1850	m	dragas 1115
1330-1600	t	dragas 1115
1620-1850	t	dragas 1115
1910-2150	t	dragas 1115
1630-1900	r	dragas 1105
1500-1730	f	dragas 1115
1500-1730	f	web conference – <i>for online students</i>
1910-2150	t	web conference – <i>for online students</i>

Recitations

1745-1835	w	dragas 1115
1100-1150	r	dragas 1105
1430-1520	r	dragas 1105
1530-1620	r	dragas 1105
1745-1835	r	web conference – <i>for online students</i>

All students must register for a lecture, lab, and recitation. Students are expected to attend the lecture, lab, and recitation sessions for which they have registered.

1.3 Instructor

Dr. Ayman Elmesalami

Contact:

Office: Dragas, room 1100B

Email: aelmesal@odu.edu

Office hours:

- Tuesday & Thursday from 10:50am to 11:50am

TAs & Graders (TBA)

- Office hours (*will be posted on Blackboard under "Teaching Staff"*)

1.4 General Organization of the Course

The course is divided into several topics. Each topic is addressed by lectures and textbook readings and accompanied by a variety of activities including:

- **Labs** - ungraded activities that introduce or practice techniques that you will use in the assignment
- **Assignments (homework)** - graded activities, most of which involve programming

- There will be a **midterm exam** and **final exam**.
- There will also be a semester "**term**" **project** in which you will apply the techniques of design, coding, testing, and debugging to a larger problem than is tacked in the assignments.

1.5 Required Textbook:

Malik, C++ Programming: from Problem Analysis to Program Design, 8th Edition, ISBN- 978-1337102087

- This book is frequently sold with accompanying CDs. We won't use them, so don't worry about it. If you can get a used copy that is missing the CDs, or if you can get a better price on a new one without the CDs, go for it!
- Note, the 7th edition of the textbook is also good for this class. The instructor and TAs will use the 8th edition.

2. Course Pre- and Co-requisites

The prerequisites for this course are:

- CS 150, Problem Solving and Programming I
- Math 163

or equivalents.

The co-requisite for this course is:

- CS 252, Introduction to Unix for Programmers
(*A co-requisite is a course that must be taken before or during the same semester as this course.*)

3. Assignments

Assignments for this course will include "weekly" assignments and a term project. Both will involve programming in C++

3.1 C++ compiler

The "official" compiler for this course is the Free Software Foundation's **g++** (also known as **gcc** or **GNU CC**), **version 4.8.1** or higher. This is the compiler that the instructor and/or grader will use in evaluating and grading projects. If you have access to other compilers, you may use them, but you are responsible for making sure that their projects can be compiled by the instructor and/or the course's grader using the official compiler.

You may want to develop your programs on the most convenient compiler and then port it over to the official environment. Please don't underestimate the amount of time that may be involved in coping with subtle differences among compilers.

You can do all work in this course using **g++** on the CS Dept Unix servers via ssh/X or via the CS Dept's Virtual PC Lab. If you like, however, you can obtain the g++ compiler for free from a variety sources.

3.2 Computer Access:

Students will need an account on the **CS Dept. Unix network** to participate in this class. This account is unrelated to any University-wide account you may have from the ODU's computing services (OCCS). If you have had a CS Unix account in the recent past, you should find it still active with your login name, password, and files unchanged. If you have had an account and it has not been restored, contact the CS Dept systems staff in the lab in Dragas Hall, Room 1111K or email root@cs.odu.edu requesting that it be restored. If you do not yet have such an account, follow the directions provided in the pdf file (Account Setup) to get set up.

Please note that, new account creation for students enrolled in a future semester becomes available about one week before the start of that semester.

4. Exams

- **Midterm:**

will be available on **Blackboard** in week 9 (*March 12th – March 16th*) of the semester:

1. **Face-to-face students** will write the midterm exam *in the lab during your regular lab time of that week*
2. **Distance Education (Online) students** will be proctored by ProctorU *during that week*
Further information about proctorU will be provided before the exam time

- **Final exam:**

will be available on **Blackboard** during the *final examination week*

1. **Face-to-face students** will write the exam *as in the final exam dates file, which is posted on Blackboard under the “Exams” section*
2. **Distance Education (Online) students** will be proctored by ProctorU *during the examination week*
Further information about proctorU will be provided before the exam time

Please note that the final exam is cumulative

5. Course Policies

5.1 Assignments and Grading

Assignments will be turned in through the **Blackboard**. Late submissions of assignments or of the portions of the semester project and make-up exams will not normally be permitted.

Exceptions will be **made only in situations of unusual and unforeseeable circumstances beyond the student's control**, and such arrangements must be made prior to the due date in any situations where the conflict is foreseeable.

“I’ve fallen behind and can’t catch up”, “I’m having a busier semester than I expected”, or “I registered for too many classes this semester” are not grounds for an extension. Extensions to due dates **will not be granted** simply to allow “porting” from one system to another. “But I had it working on my home PC!” **is not an acceptable excuse also**. Students are responsible for making sure that their projects can be compiled by the instructor and/or the course’s grader using the official compiler on the computers in the lab.

5.2 Re-grading Policy

Grades will be posted online on BlackBoard. It is the student’s responsibility to verify that the posted grade corresponds to the grade actually received and to notify the grader and instructor of any error ASAP. Re-grading request should be submitted to the Grader **within 7 days** after the marks are posted on blackboard and during Grader’s office hours. All assignments have hard deadline - no late submission will be accepted for marking. For unforeseen events (family emergency, sickness), contact the class instructor before the due date. Prove is required, *i.e.*, a doctor note.

Notes:

- The grader might not be the same person who is teaching your lab/recitation. You need to know your Grader, lab instructor, and your recitation instructor.
- TAs can answer questions about labs, assignments, projects, and exams. You can meet with any of the CS250 TAs for that reason. If you want to discuss your grades, you must meet with your grader (*the person who grades your assignment/project*). Only the person who marks your assignment and project can answer questions about your grades. The office hours of the Instructor, TAs, and graders will be posted on Blackboard under “Teaching Staff.” The list of graders will be posted on Blackboard under “Assignments and Projects”. You will find a pdf file including three columns (Student name, Grader name, and Grader email).

5.3 Academic Honesty

Everything turned in for grading in this course must be your own work. The instructor reserves the right to question a student orally or in writing and to use his evaluation of the student's understanding of the assignment and of the submitted solution as evidence of cheating. Violations will be reported to the Office of Student Conduct & Academic Integrity for consideration for possible punitive action. Students who contribute to violations by sharing their code/designs with others may be subject to the same penalties.

This policy is not intended to prevent students from providing legitimate assistance to one another. Students are encouraged to seek/provide one another aid in learning to use the operating system, in issues pertaining to the programming language, or to general issues relating to the course subject matter.

Students should avoid, however, explicit discussion of approaches to solving a particular programming assignment, and under no circumstances should students show one another their code for an ongoing assignment, nor discuss such code in detail.

5.4 Grading:

Assignments (<i>weekly programming homework</i>):	40%
Semester Project:	20%
Midterm Exam:	15%
Final Exam:	25%

Total: **100%**

Important note: the labs and recitations are not graded activities, but we will always check attendance for extra marks. Participation in labs and recitations can help you to get **up to 3% bonus** marks. A student who will attend and complete all activities of **all** labs and recitations will receive the complete 3% bonus marks.

Letter Grade:

Percent Scored	Grade
93-100	A
90 - <93	A-
88 - <90	B+
82 - <88	B
80 - <82	B-
78 - <80	C+
70 - <78	C
68 - <70	C-
60 - <68	D
<60	F

5.5 Attendance:

Students are responsible for all the material that is presented in the class, therefore students should attend lectures, labs and recitations regularly. Important lecture information and announcements are usually given during class time, so failure to attend class may negatively affect your grade.

Labs and recitations are not graded activities, but we will always check attendance for extra marks. Participation in labs and recitations can help you to get **up to 3% bonus** marks.

6. Accessibility information:

Students are encouraged to self-disclose disabilities that have been verified by the Office of Educational Accessibility by providing Accommodation Letters to the instructor early in the semester in order to start receiving accommodations. Accommodations will not be made until the Accommodation Letters are provided to instructor each semester. The accessibility information can be found at:

<https://www.odu.edu/educationalaccessibility>